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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/538,475	03/30/2000	Masao Tokita	Q58571	8142

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EXAMINER

NGUYEN, THUKHANH T

ART UNIT	PAPER NUMBER
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1722

DATE MAILED: 04/01/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/538,475

Applicant(s)

TOKITA, MASAO

Examiner

Thu Khanh T. Nguyen

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 03 January 2003.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-22 is/are pending in the application.
- 4a) Of the above claim(s) 1-10 is/are withdrawn from consideration.
- 5) ☒ Claim(s) 22 is/are allowed.
- 6) ☒ Claim(s) 11, 16, 17 and 19-21 is/are rejected.
- 7) ☐ Claim(s) 12-15 and 18 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ 6) ☐ Other: _____

DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claim 11 is rejected under 35 U.S.C. 102(b) as being anticipated by Pettersson et al (5,747,073).

Pettersson et al teach an apparatus for pressing composite cylinders, comprising a mold conveyor system (16) with a lower press core (36) fitted in a mold bore (37), a powder filling mechanism (22) being located at a powder filling position defined along a transportation path of the mold conveyor system (16), a press unit (45) with a lower press member (76) and an upper press member (52) for pressing the powder material into a powder compact, wherein the filled mold is conveyed out of the powder filling position and a new mold with no powder material being conveyed to the filling position (col. 3, lines 11-18).

3. Claims 11, 17 and 20-21 are rejected under 35 U.S.C. 102(e) as being anticipated by Kato et al (6,227,836).

Kato et al teach an apparatus for forming tablets, comprising a mold conveyor system (3) for supporting and conveying the mold with a lower press core fitted in the mold bores (Fig. 3F, 16, 17), a rotary powder filling mechanism (2) located at a powder filling position along a transportation path of the conveyor system (Figs. 2 & 7), a press

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unit (14) with an upper and lower press member (16, 17 – claim 17) for compacting the powder material. Wherein the filled mold is conveyed out of the powder filling position and a new mold with no powder material being loaded is conveyed to the powder filling station (col. 2, lines 35-49 – Claim 11).

The powder filling mechanism (2) comprising a hopper (11) and movable filling shoes (6), a trickle mechanism for strickling excess material off the top surface of the mold (col. 5, lines 21-25 – claim 17), a support plate (12, 2) having a top surface and a hole sized to receive the upper end of the mold (Fig. 3B-C), a hopper (11, 6) having a bottom surface to be movable on top surface of the support plate (12, 2), with the bottom surface being in contact with the top surface of the support plate (Fig. 3A), wherein the hopper (11, 6) having a bottom opening corresponding with the bore of the mold (Fig. 3B, 6-7 – claim 20).

The hopper, or filling shoes are movable between a first position at which the bottom opening is closed by the support plate (Fig. 3A, 12) and a second position at which the filling shoes are aligned with the hole in the support plate (Fig. 3b) to complete the filling process (claim 21).

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

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5. Claim 17 is rejected under 35 U.S.C. 103(a) as being unpatentable over Pettersson et al (5,747,073) as applied to claim 11 above and further in view of Yamamoto (4,373,888).

Pettersson et al disclose a press as described above, but fail to disclose a strickle system for strickling off excess material on the surface of the mold.

Yamamoto discloses a tablet press for pressing powder material into tablets, comprising a hopper (25) supplying powder material to a feeder (26). The feeder (26) filled each die cavity (12) and any excess material is scrapped off by the edge of the feeder (col. 3, lines 11-17).

It would have been obvious to one of ordinary skill in the art at the time the applicant's invention was made to modify Pettersson et al by providing a powder scrapper or a strickle mechanism at the edge of the hopper as taught by Yamamoto; because the scrapper would wipe off the excess material, the mold surface would obviously be cleaned and the excess material can be recycled back to the feeder preventing material lost during the molding process.

6. Claims 16 is rejected under 35 U.S.C. 103(a) as being unpatentable over Pettersson et al as applied to claim 11 above, and further in view of Teboul (3,654,970).

Pettersson et al disclose a press as described above, but fail to disclose a weight measuring means.

Teboul discloses a device for automatically feeding powder material to a die or press including a weight measurement device (74; col. 3, lines 8-11) to control the movement of the pressing members (82, 84).

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It would have been obvious to one of ordinary skill in the art at the time the applicant's invention was made to modify Pettersson et al by providing a weight measuring unit as taught by Teboul because it would regulate the amount of material being fed into the mold cavities to form uniform compacted product.

7. Claims 19 is rejected under 35 U.S.C. 103(a) as being unpatentable over Pettersson et al in view of Yamamoto as applied to claims 11 and 17 above, and further in view of Kato et al (5,603,880).

Pettersson et al and Yamamoto disclose a powder pressing apparatus as described above. These references fail to disclose that the filling mechanism comprises a rotary table capable of the indexing movement.

Kato et al disclose a powder pressing apparatus comprising a turntable (3) rotatable by a driving unit (2). The turntable includes a plurality of filling holes (11) displaced above the mold cavities (9) for distributing powder material.

It would have been obvious to one of ordinary skill in the art at the time the applicant's invention was made to modify Pettersson et al by providing a filling mechanism displaced on a turntable as taught by Kato et al, because the turntable would support a plurality of feeders on a smaller area and would obviously be able to control the uniformity movements of the feeders during the pressing.

Allowable Subject Matter

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8. Claims 12-15 and 18 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

9. Claim 22 is allowed over the prior art of record.

10. The following is a statement of reasons for the indication of allowable subject matter:

In regard to claims 12-15, the prior art fail to teach or suggest an apparatus for automatically loading a desired amount of powder material into a mold having a mold conveyor system comprises a guide rail, a carrier movable along the guide rail capable of supporting for vertical displacement the mold with the lower press core fitted in the bore of the mold; a powder filling system comprises a hopper located above a transportation path of the carrier and a strickle mechanism to level of a top surface of the mold; and a press unit with upper and lower press.

In regard to claim 18, the prior art fails to teach or suggest an apparatus for automatically loading a desired amount of powder material into a mold having a mold conveyor system including a guide rail, a movable base moved along the guide rail and having a number of holes formed therein and arranged inline, each of the holes being adapted to be aligned with the bore of the mold; a stop member attached to the movable base for limiting upward displacement of the mold; and a drive unit for driving the movable base.

11. The following is an examiner's statement of reasons for allowance of claim 22: the prior art fails to teach or suggest a powder filling mechanism, comprising a support plate having a top surface and a hole for receiving an upper end of the mold, wherein the

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upper end of the mold is fitted in the hole without any substantial clearance therebetween and with the top surface of the support plate and the top surface of the mold being flush with each other; a hopper with a bottom surface contacted with the top surface of the support plate; wherein the hopper having a bottom opening for dispensing powder material, which opens at the bottom surface and has a size equal to or greater than that of the top opening of the bore of the mold; wherein the hopper is movable along a straight path on top of the supporting plate between first and third positions at which the opening of the hopper is closed by the supporting plate; and a second position during a stroke between the first and third positions, at which the bottom opening of the hopper is aligned with the hole in the support plate, and the filling is completed by a single stroke of the hopper from the first and third positions to the other.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Response to Arguments

12. Applicant's arguments with respect to claims 11-22 have been considered but are moot in view of the new ground(s) of rejection.

Regarding to the reference of Hauser '434, the Applicants argued that this reference fails to disclose that the mold in which the desired amount of material is loaded is conveyed out of the powder filling position and a new mold with no powder material being loaded is conveyed to the powder filling station. This limitation is newly added to

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the claim. New rejections have been made in view of Pettersson et al ('073) or Kato et al ('836) to cover this limitation.

Rejections in view of Plocher et al have been withdrawn. Claim 22 has been allowed. Claims 20-21 are rejected over Kato et al ('836).

Regarding to the Yamamoto reference, the Applicant asserted alleged that this reference discloses a dry lubricant dispensing system and would not have been taught to provide Hauser with a strickle mechanism. The examiner agrees with the Applicant that Yamamoto teaches the dry lubricant system (28), but also would like to point out that this reference does teach the material strickle mechanism as well (26, col. 3, lines 16-17). Therefore, it would have been obvious to an artisan skill to apply the strickle mechanism as taught by Yamamoto onto other powder-pressing machine.

Conclusion

13. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the

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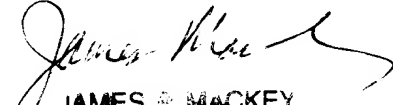
advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Thu Khanh T. Nguyen whose telephone number is 703-305-7167. The examiner can normally be reached on Monday- Friday, 6:30-4:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Wanda L Walker can be reached on 703-308-0457. The fax phone numbers for the organization where this application or proceeding is assigned are 703-872-9310 for regular communications and 703-872-9311 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-0661.

TN
March 24, 2003


JAMES A. MACKEY
PRIMARY EXAMINER

3/24/03